

Amendments to the Claims

Claims 1-26 (cancelled).

27. (New) An apparatus for producing oxidic nanocrystals which comprises at least one vaporizer connected to a carrier gas source and a reactor having a heating zone, an adsorption trap connected downstream of the reactor and a vacuum pump connected downstream of the adsorption trap.

28. (New) The apparatus as claimed in claim 27 wherein a heatable tube is arranged between the vaporizer(s) and the reactor.

29. (New) The apparatus as claimed in claim 27 wherein the reactor comprises a cylindrically designed heating zone.

30. (New) The apparatus as claimed in claim 27 wherein a baffle is arranged inside the reactor at one end of the heating zone.

31. (New) The apparatus as claimed in claim 27 wherein a second adsorption trap is connected between the adsorption trap and the vacuum pump and a filter is connected between the second adsorption trap and the vacuum pump.

32. (New) The apparatus as claimed in claim 27 wherein the adsorption trap is a cold trap.